Snappi ®

WHEELBASE AND INTERFACE
WORKSHOP MANUAL

IMPORTANT

Please read these instructions carefully
Before attempting to maintain the Wheelbase or Interface

Fig 0.1 Wheelbase (size 1 shown)

Fig 0.2 Wheelbase Folded (size 1 shown)

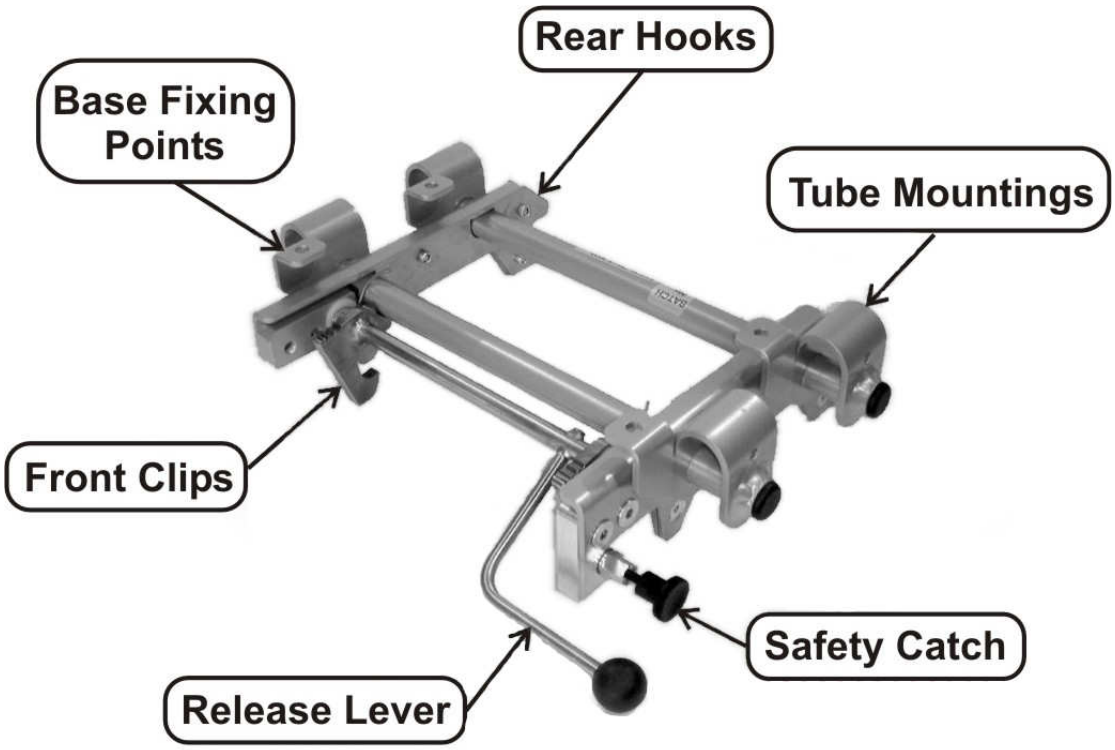


Fig 0.3 Seat Interface (size 1 shown)

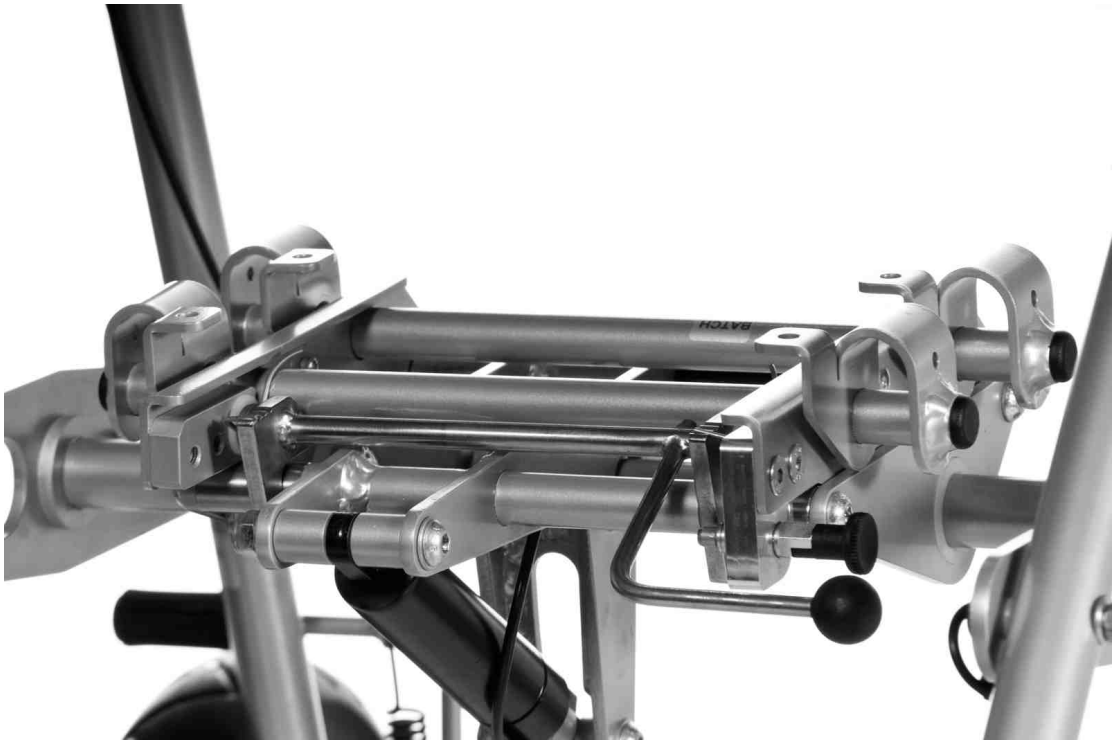


Fig 0.4 Frame with Interface Fitted (size 1 shown)

CONTENTS

Item	Description	Page
1	Your Snappi Wheelbase and Interface Workshop Manual	6-7
2	Transit Packaging	8
3	Tools & Torque Settings	9
4	Preparing for use and operation	9
	4.1 Unfolding the frame	9
	4.2 Brakes	9
	4.3 Tilt In Space	10
	4.4 Working with the interface	10
5	Fitting Special Seat	10-11
6	Final Checks	12
7	Maintenance	12
	7.1 Routine maintenance	12
	7.2 Six monthly maintenance	12-13
8	Repairs	13
	8.1 Rear wheels	14
	8.2 Castor assembly and front tie down bracket	15
	8.3A Original Brake assembly	16
	8.3B Pin Brake Assembly	17–21
	8.4 Gas strut	22
	8.4.1 Change the end fittings on the gas spring cable	23-24
	8.4.2 Replace the tilt cable, leaving the release lever in place	25-26
	8.4.3 Replace the tilt cable and release lever assembly	27
	8.5 The Interface	28-29
	8.6 Replace Push Handle Adjustors	29-30
	8.7 Locking Slider	30-33
	8.8 Fitting Vertical Cylinder Carrier	34-40
9	Rearward Conversion	41-45
9.1	Converting a rearward pushchair to forward facing, fitting transit brackets	45-46
10	Cleaning	46
11	Parts Lists	46

1: Your Snappi Wheelbase / Interface Workshop Manual

The purpose of this manual is to help you get the best from your wheelbase & interface. It does this by telling you how to complete those maintenance and repair tasks that can be carried out by a competent person. The manual also tells you when you should contact the manufacturer who is:

Tendercare Ltd.
PO BOX 3091, Littlehampton, BN16 2WF
Tel: (01903) 726161 Fax: (01903) 734083
Email: info@tendercareltd.com
Web: www.tendercareltd.com

IMPORTANT:
This manual must be read and used in conjunction with the user manual.

The **Wheelbase** is made of a strong and lightweight aluminium alloy, minimising weight and providing a very rugged frame. The wheelbase provides a tilt in space facility and has 2 fixed rear wheels and 2 castor wheels at the front for easy steering. The wheelbase comes in two sizes with corresponding interfaces to suit a range of different seats.

The **Interface** provides a very lightweight, easy to operate, quick release system that can be fitted to a wide range of special seating system. Please note the interface requires additional framework to fit to a seat, and has been designed to take 19mm (3/4") aluminium or mild steel tube.

The interface can be quickly fitted and released from the wheelbase, which can be folded for transport. The Snappi has been successfully impact tested as a wheelbase and interface, with the Modular and Snug seating systems. When fitting 3rd party seating systems to the Snappi, the manufacturer of the system must carry out a risk assessment before use.

These instructions apply to all sizes.

Interfacing Options:

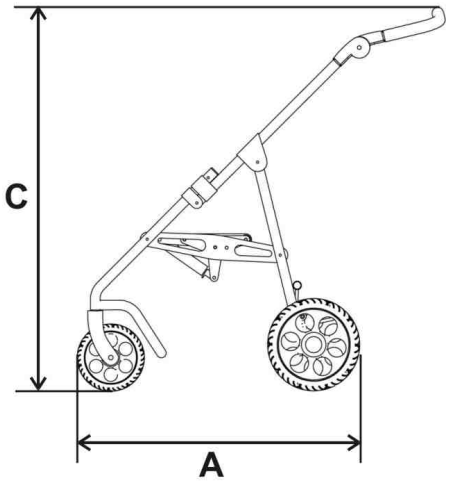
Seat / Interface Version	Maximum Weight (Kg)	Maximum Seat Width (mm)
Size 1	50	350
Size 2	50	415

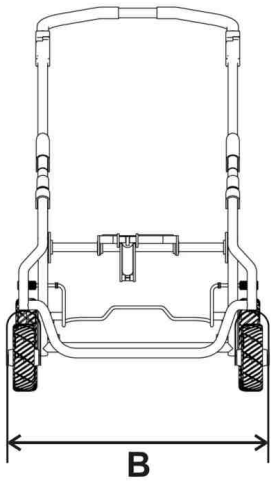
IMPORTANT:

- *Maximum width; maximum space available for seating systems being fitted into frame.*
- *Maximum weight includes the seat unit, occupant and all accessories.*

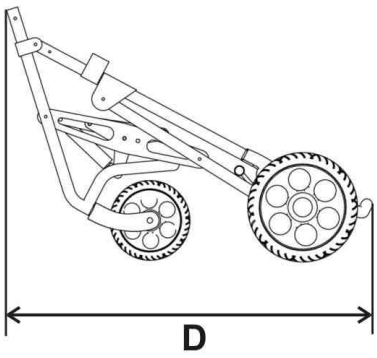
Frame Weight:
Size 1: 10kg
Size 2: 11kg

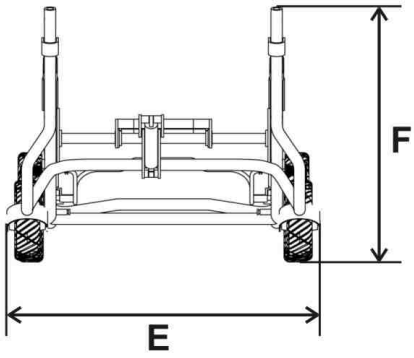
Dimensions (mm)	Snappi Wheelbase Open	
	Size 1	Size 2
A	944	960
B	571	684
C	992	998





Dimensions (mm)	Snappi Wheelbase Folded	
	Size 1	Size 2
D	771	798
E	571	684
F	573	560





All sizes and weights are given as a guide. Tendercare ltd reserves the right to amend specifications at any time as part of their product development programme.

2: Transit Packaging

The wheelbase and interface are delivered together in a cardboard carton. This measures 680mm wide x 480mm deep x 1030mm high and weighs approximately 15Kg.

WARNING:
The transit carton is quite bulky so moving and unpacking must be done with care. Observe all lifting and handling regulations.

Stand the carton upright making sure it is supported and cannot fall over. Open the carton and remove any packages or packing materials, which could obstruct the removal of the wheelbase. Remove the wheelbase.

The carton should contain the following items:

Item	Component	QTY.	Yes	No
1	Size 1 or 2 Wheelbase *(if ordered)*	1		
2	Size 1 or 2 Interface *(if ordered)*	1		
3	User Manual	1		

IMPORTANT:

- ***The interface will be supplied fitted to the frame. These can easily be separated by releasing the interface catch once the frame has been removed from its packaging. Please refer to section 4.4 of the user manual for more information on working with the interface.***

- ***If any items are damaged or missing, then please contact Tendercare, preferably by email at info@tendercareltd.com or alternatively please call us on (01903) 726161 within 36 hours of delivery.***

After unpacking and checking that you have all the components and that they are in good condition dispose of the packaging at your local recycling centre. Alternatively retain and reuse.

3: Tools and Torque Settings

The following tools are required to dismantle, reassemble and repair the Wheelbase / Interface:

Spanners and sockets:	10mm, 13mm and 19mm
Hexagon Keys:	4mm, 5mm and 6mm
Torque Wrench:	Range 0 to 50 Nm
Screwdrivers:	2 small flat blade screwdrivers

Torque Settings If Not Specified	
Spanner Size (mm)	**Torque (Nm)**
10	15
13	25
19	50

4: Preparing for use and operation

WARNING:
When opening or folding the wheelbase, ensure that you hold the frame so that you avoid any danger of catching your fingers in moving parts.

The following pre-delivery procedures should be carried out to check that the wheelbase and interface has not suffered damage during transit and that all features operate satisfactorily. Refer to the user manual for detailed instructions on performing each action.

4.1 Unfolding the Frame

Unfold and assemble the frame: Follow the instructions in section 4.1 of the user manual

Checks:

- Make sure all joints move freely
- Make sure the frame locks latch correctly
- Check that the push handle adjustors work
- Ensure that all fixings are secure and that the frame has not been bent or otherwise damaged during transit.

4.2 Brakes

Test the brakes: Follow the instructions in section 4.2 of the user manual

Checks:

- Make sure the brakes work correctly
- Check that the fixing bolts are secure

WARNING:
The break mechanism is spring loaded so care must be taken when operating it.

4.3 Tilt In Space

Test the tilt in space mechanism: Follow the instructions on section 4.3 of the user manual.

Checks:

- Make sure that the cable mechanism works correctly and that the cable is not trapped in any way.
- Check that the centre section tilts correctly and locks throughout its adjustment range.
- Check that the 4 bolts that mount the centre section into the frame are secure.

IMPORTANT:

- ***Always support the seat when tilting, as the gas springs can be quick to operate. If the seat is not supported, it may move swiftly and could cause the occupant distress.***

4.4 The Interface

Test the operation of the interface: Follow the instructions on section 4.4 of the user manual to attach and remove the interface.

Checks:

1. Make sure that the interface frame has not been bent or damaged during transit
2. Check that the spring clips move freely and snap back to their closed position when the lever is released
3. Make sure the interface latches down and locks securely to the frame
4. Check that the secondary latch mechanism functions correctly
5. Check that the interface releases correctly and that there is not excessive friction on the lever when releasing it from the frame

IMPORTANT:

- ***The interface is spring loaded, so ensure your fingers are clear of the clips before fitting.***

5: Fitting a Special Seat

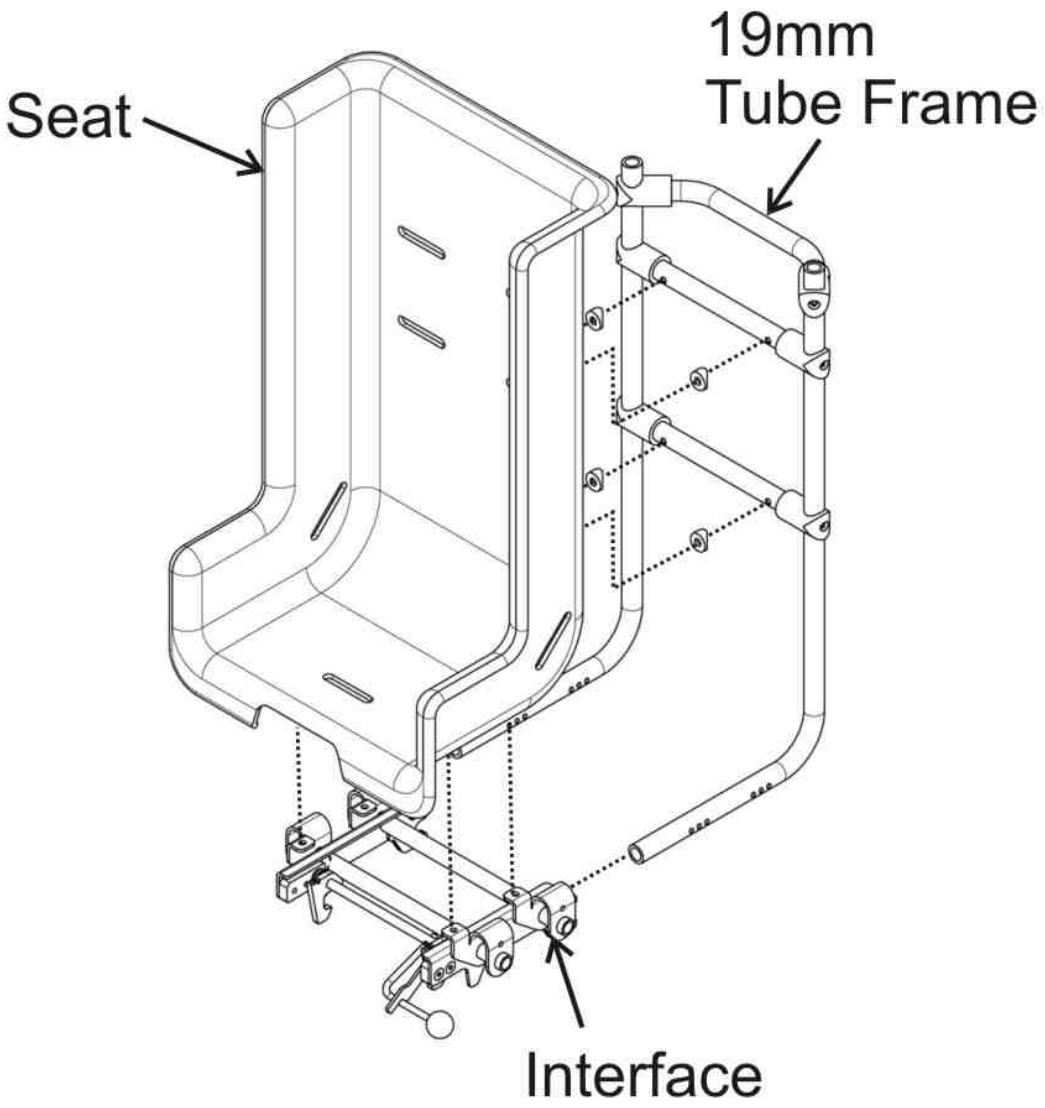
The interface is designed to bolt onto the base of a special seating system using the 4 base fixing points.

The interface should always be fitted with a suitable framework and includes 4 tube mounting brackets that fit 19mm or ¾" aluminium or mild steel tube.

We recommend using ¾" x 10 SWG (or 19 x 3mm metric) aluminium tube in grade 6063 T6 for the frame mounting. Alternatively 16 SWG (1.6mm) mild steel tubing can be used.

Due to the wide range of different special seating systems, Tendercare do not supply fixing brackets for these items. Please refer to the special seat manufacturers instructions.
An example set up using the interface is shown below:

Fig 5.0.1



IMPORTANT:

- ***The Snappi has been successfully impact tested as a wheelbase and interface with the Modular and Snug seating systems. When fitting third party seating systems to the Snappi, the manufacturer of the system must carry out a risk assessment before use.***

- ***When fitting a third party seat stability may be affected. A test is necessary to confirm that the static stability is satisfactory. A stability test to meet the requirements of EN.ISO7176 must be completed by the commissioning wheelchair service. This test must be passed before handover of the system.***

6: Final checks

1. Check that the special seat is firmly attached to the interface and framework.

2. Check that all harnesses are secure and adjusted properly.

3. Check that the interface is located and locked correctly in the wheelbase.

7: Maintenance

Should a problem be found when carrying out the regular checks, it should be immediately reported to the issuing authority or Tendercare Ltd.

7.1 Routine maintenance

The users family can easily carry out the following tasks. No tools are required.

1. Always wipe the wheelbase and seat frame dry. Never put them away damp.

2. Check operation of the brake, folding and reclining mechanisms (weekly).

3. Clean frame when necessary (we suggest at least once a week).

If you find any faults refer to your issuing authority or Tendercare Ltd.

7.2 Six-monthly maintenance

Only someone who is a competent tradesman or repairer should carry out this work. If a major fault is found stop using the wheelbase until it has been corrected.

1. Fold and open the wheelbase. Check that all movements through the folding range are free. Examine frame for any damage.

2. Check operation of the wheelbase tilt in space mechanism.

3. Examine nuts, bolts, pivots and frame plugs for tightness and general condition.

4. Examine brake assembly for wear, damage and correct operation.

5. Examine tyres for sharp objects, cuts or splits.

6. Examine castor and wheel bearings for excessive wear.

7. Check castors and rear wheels for free rotation, security and accumulation of fluff and grit. Remove any fluff and grit with a dry lint free cloth.

8. Check the Interface fits securely into the frame, and that it is not worn or damaged.

9. Check the interface clips to ensure they can rotate freely and that the springs return the clips to the closed position when released.

For all other repairs refer to your issuing authority or Tendercare Ltd.

8: Repairs

Only an authorised repairer should carry out the following repairs.

1. Repairs: For all repairs contact your issuing authority

2. Major repairs: For all major repairs e.g. bent or damaged frame, the wheelbase / interface should be returned to the factory. Contact Tendercare ltd, customer services on 01903 726161, or email to info@tendercareltd.com

3. Factory replacement components should be used in all repairs. These are available from Tendercare. Please refer to the parts lists at the end of this manual (section 10) for details of replacement parts.

Important points when performing a repair:

1. Do not reuse Nylock nuts, always replace with a new nut

2. Always use Loctite thread locking compound grade 241 or 243 on all threads when reassembling any part of the system.

3. Always use the recommended component parts available from Tendercare Ltd.

4. Do not attempt to correct bent framework or perform any modifications to welded parts. If any main framework sections are bent or damaged please return the product to the factory.

8.1: Rear Wheels

Replace if damaged or worn. To change the rear wheel:

Fig 8.1.1

- Remove the wheel cap using a small screwdriver (see fig 8.1.1 left)
- Note the position of the axle spacer and washers
- Using a 19mm spanner, undo the axle bolt and remove the wheel from the frame (see fig 8.1.2 below)

Fig 8.1.2

- To fit the new wheel: Ensure the large nylon washer is placed under the head of the M12 bolt.
- Fit this through the wheel and slide the axle spacer onto the protruding bolt.
- Place a new M12 Nylock nut into the axle support, and screw the bolt into the nut (the axle support will prevent the nut from turning)
- Tighten to 35Nm with a torque wrench
- Finally push fit the wheel cap over the bolt head.

8.2: Front Castors and Front Tie Down Bracket

Replace if damaged or worn. To change the front castor:

Fig 8.2.1

- To fit the new castor, first ensure the wheel is removed from its housing.
- Next fit the hosing to the frame and tighten to 35Nm with a torque wrench
- Screw the new wheel into the castor housing using a 5mm hexagon key and tighten firmly (no other tool is required to fit the wheel as the castor housing includes a captured nylock nut).

Fig 8.2.3

- Remove the wheel by unscrewing the M8 socket cap bolt using a 5mm hexagon key.
- Next remove the castor housing using a 19mm spanner

Fig 8.2.2

- Snappi wheelbases ordered after November 2012 come supplied with a front tie down bracket. This fits between the front castor and frame.
- To replace the front tie down bracket, remove the front castor as detailed above. Slide the tie down bracket over the bolt with the loop facing the front of the pushchair, and refit the castor to the frame.
- Always apply Loctite thread locking compound onto the castor bolt before refitting to the frame.

8.3A: Original Brake Assembly (pushchairs supplied before June 2015)

Replace the brake bar if it is bent or damaged. The springs may also be replaced if corroded or stretched.

IMPORTANT

- ***The brake system uses two high-tension springs. Care must be taken when working on the brake mechanism. The following instructions are the recommended method for dismantling the brake system to safely release the tension on the springs. If you are not confident to work on this assembly please return your frame to the Tendercare factory.***

To dismantle the brake assembly:

Fig 8.3.1

- Undo the brake bar pivot bolt using a 10mm spanner and 4mm hexagon key. ***Care must be taken at this stage, as there will still be some tension on the spring.***

Fig 8.3.3

- Put the break into the “off” position, and remove the 2 rear wheels as detailed in section 8.1 of this manual.

- Next flip the brake bar down to the “on” position. As there are no wheels the bar will move much further and release most of the tension on the springs as shown in figure 8.3.1 (left).

Fig 8.3.2

- Once the 2 pivot bolts are released the bar will drop down and rest against the frame.

- To release the springs, lift the bottom of the brake bar up and round past the frame bar as shown in figure 8.3.3. Now the tension on the spring will be fully released and they can easily be unhooked.

- To refit a new brake bar or springs, follow the reverse of this procedure.

8.3B: Pin Brake Assembly (pushchairs supplied after June 2015)

Replace the brake bar if it is bent or damaged. The springs, actuators and guide bushes can also be replaced if warn.

IMPORTANT

- ***The brake system uses two compression springs. Care must be taken when working on the brake mechanism. The following instructions are the recommended method to safely dismantle the brake assembly. If you are not confident to work on this assembly please return your frame to the Tendercare factory.***

To remove the pin brake. First set to the brake to the ON position (for instructions how to do this please refer to the user manual).

Then, remove the rear wheels (see section 8.1).

Fig 8.3.4

Fig 8.3.5

As the brake is set to ‘on’ the ends of the lock pins will be accessible. Use a pair of grips to pull one of the pins out against the spring to reveal the 2mm ‘assembly’ hole in the brake pin (see Fig 8.3.5, left).

Push a 2mm pin through the assembly hole (pins will be provided with replacement brake parts).

This will hold the brake pins in the fully extended position.

Fig 8.3.6

Fig 8.3.7

Using a hex key and spanner / socket remove the 6 socket button bolts that secure the brake actuator to the actuator caps as shown (see Fig 8.3.7, left).

With all the bolts removed, slide the brake actuator caps towards the middle of the frame and remove them as shown (see fig 8.3.8, right).

Fig 8.3.8

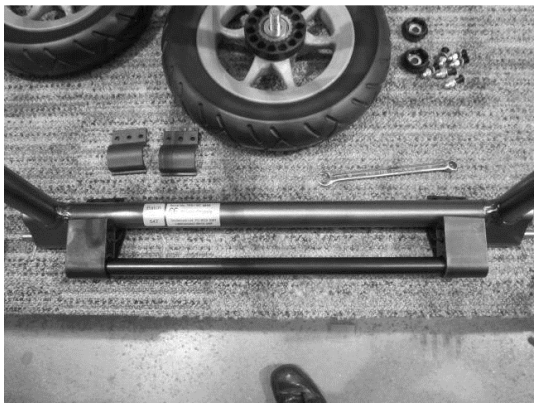


Fig 8.3.9

Fig 8.3.8 Left: The brake bar with the actuator caps removed.

You will now be able to remove the brake bar assembly from the frame.

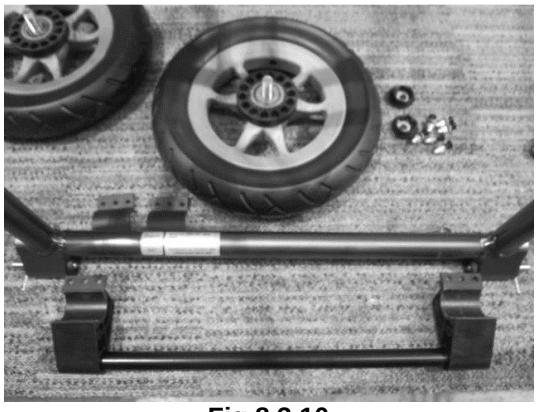


Fig 8.3.10

Fig 8.3.11

Undo the 2 M4 screws securing the brake actuators to the brake bar using a hex key as shown (see fig 8.3.11, left).

Fig 8.3.12 Right: The brake bar removed from the actuators.

Fig 8.3.12

Fig 8.3.13

To remove the lock pins, springs and guide bushes: First place a block of wood on the inside of the frame as shown in fig 8.3.13 (this is to provide a stop for the brake pin when the spring is released).

With the block of wood held in place, pull out the 2mm pin to release the brake pin.

With the pressure of the spring safely released, now push the brake pin, spring and guide bush out of the mounting on the frame.

Fig 8.3.14

To re-assemble the pin brake assembly:

Fig 8.3.15

Place the wheelbase with the front frame down onto a flat surface as shown (see fig 8.3.15, left). This provides easier access to the brake mounting points.

Slide the guide bush, spring and brake pin into the mounting point as shown (see fig 8.3.16, right).

Fig 8.3.16

Fig 8.3.17

Ensure you have a pair of grips and the 2mm pin available.

Push the brake pin into the frame against the spring as shown (see fig 8.3.17, left).

Pull the brake pin out of the frame with the grips to expose the assembly hole.

Push the 2mm pin through the hole to lock the pin in place.

Repeat this for both sides, and then follow the reverse of the dismantling instructions to assemble the rest of the brake assembly.

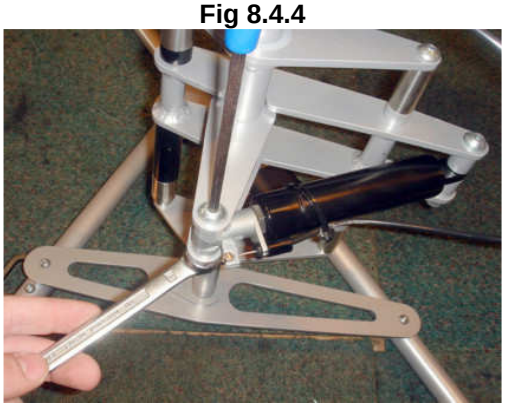
Fig 8.3.18

8.4: Mid Section and Gas Strut

Replace the gas spring if it is damaged or worn.

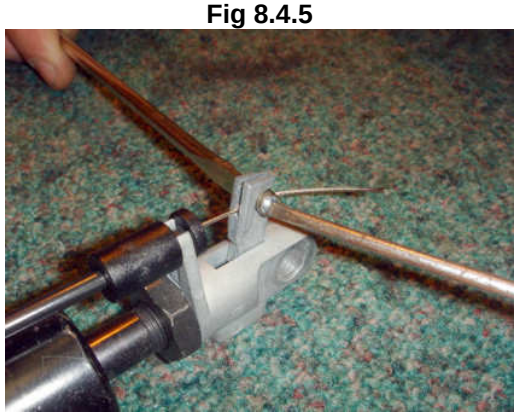
To remove the gas strut:

Fig 8.4.4



- Lift the frame onto a suitable workbench and lay it on its side
- Using a 13mm spanner and 5mm hexagon key undo the gas strut fixing bolts. Take note of the position of the washers and spacers.

Fig 8.4.5



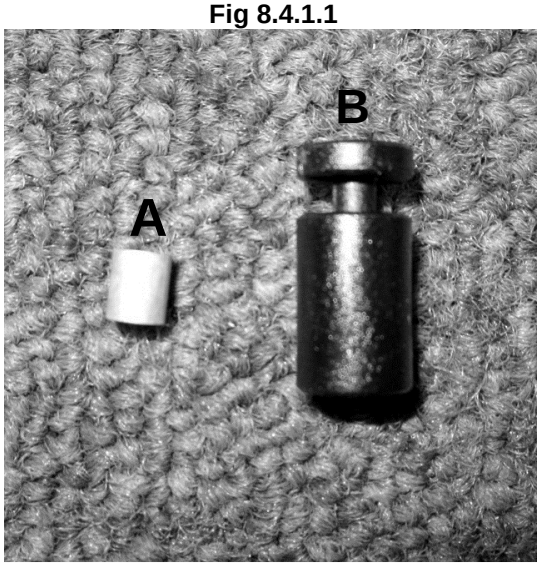
- To remove the Bowden cable, use 2 small screwdrivers to release the “screw nipple” (see right) and then slide it along the excess cable as shown in fig 8.4.6 (next page).
- Place a small screwdriver between the gas spring and the plastic clip on the Bowden cable and lever the clip away from the spring housing.
- To fit the new gas spring, clip the cable onto the head of the new spring, slide the screw nipple into the lever and tighten. Then remount in the same way as the original spring was fitted.
- Once fitted, test the operation of the gas strut as detailed in section 4.3 of this manual

Fig 8.4.6

8.4.1 Change the end fittings on the gas spring cable:

To replace the end fitting on the gas spring:

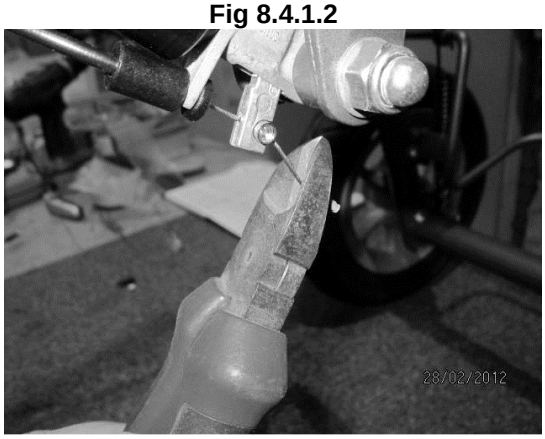
Fig 8.4.1.1



To order just the end fittings, order part SN7300B (please see the Snappi Chassis parts list). Alternatively a whole tilt cable assembly can be ordered under part code SN3700.

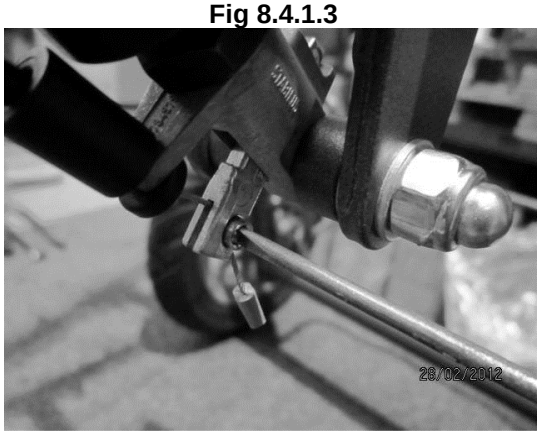
Right: The end fittings as supplied; A- aluminium crimp fitting B- the plastic cable mounting

Fig 8.4.1.2



First cut the end of the steel cable and crimp fitting off of the old cable using a pair of wire cutters.

Fig 8.4.1.3

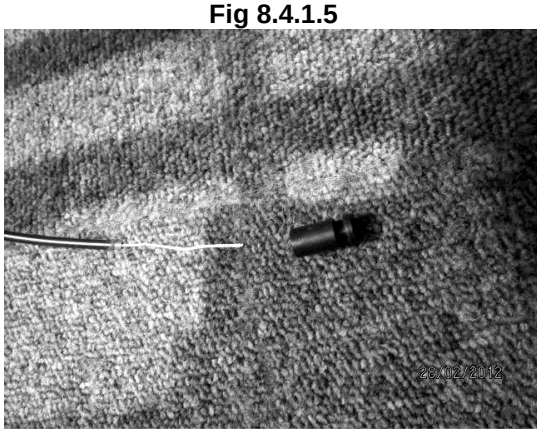


Next loosen the ‘screw nipple’ with a small screwdriver and slide off the end of the cable (please retain this end fitting).

Fig 8.4.1.4

Remove the old cable end fitting using a screwdriver and slide off the end of the cable.

Fig 8.4.1.5



Next take the new end fitting and slide onto the end of the cable, then push fit back onto the clip point on the gas spring (see below).

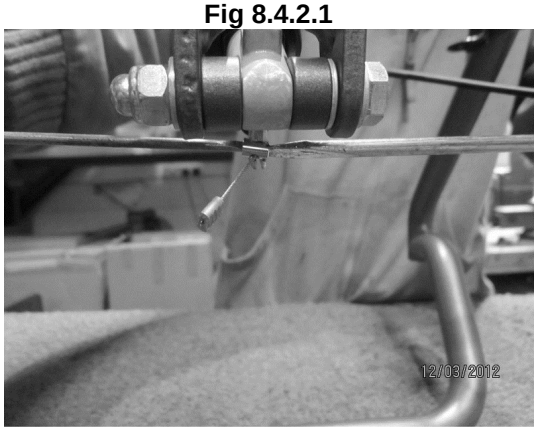
Fig 8.4.1.6

Slide the ‘screw nipple’ back onto the cable, into the scoop in the gas spring head lever, making sure all the slack is taken up in the cable, tighten with the screwdriver. Finally grip the aluminium end crimp in a large pair of grips, slide over the cut end of the cable and squash to prevent the cable end from fraying.

Finally test the operation of the gas spring, if the gas spring will not release, check the cable for slack and adjust the ‘screw nipple’ as required. For more details on the correct operation of the tilt mechanism please refer to the user manual.

8.4.2: Replace the tilt cable, leaving the release lever in place:
Replace the tilt cable if damaged or worn. This is the preferred method providing the release lever is OK. If the release lever needs to be replaced follow the instructions in section 8.4.3.

Fig 8.4.2.1

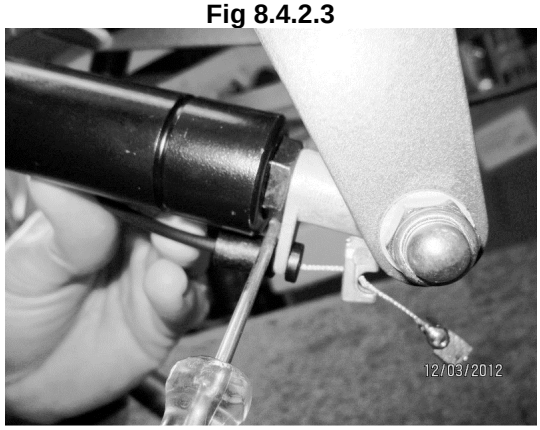


First release the ‘screw nipple’ on the old tilt cable using 2 screw drivers.

Fig 8.4.2.2

Slide this down to the end of the cable to provide some slack as shown (see left). Note the new cable will also need to be loosened off.

Fig 8.4.2.3

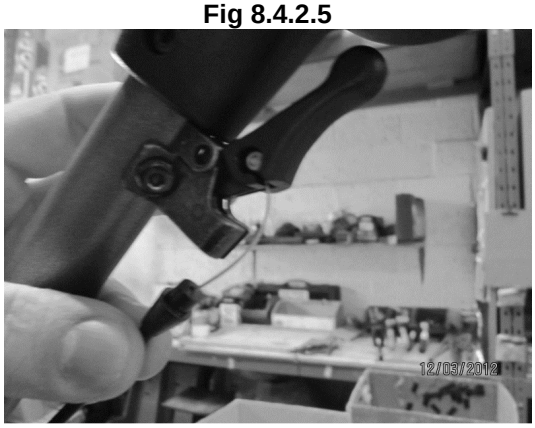


Using a small screwdriver, separate the cable mounting from the gas spring as shown (right).

Fig 8.4.2.4

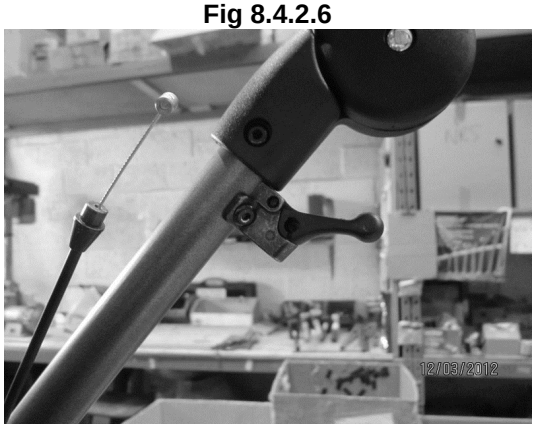
Slide the cable cover and conical mounting point down as far as it will move, taking up the spare cable from the bottom so that the cable is exposed at the top.

Fig 8.4.2.5



Lift the lever up, and slide the cable out of the slot in the lever mounting.

Fig 8.4.2.6



Unhook the cable from the lever, and then slide the cable out from the frame taking note of the routing (the correct routing is via the rear D ring, up and through the upper to rear frame joint).

Note that the replacement cable is supplied with the mounting and lever, separate the new cable from the mounting and then fit onto the original mounting on the frame, by following the reverse of this procedure.

8.4.3: Replace the tilt cable and release lever assembly:

Replace the entire cable and lever assembly if the lever is damaged or worn. Note that to do this you must first remove the push handles as detailed in section 8.6

First remove the push handle adjustors from the frame (see section 8.6 for more details).

Leave the adjustors fitted to the push handle, and refit once the cable has been replaced.

Fig 8.4.3.1

Fig 8.4.3.2

After removing the push handle, drill off the 2 pop rivets securing the release lever to the frame.

Separate the cable from the gas spring, and remove the entire cable taking note of its routing (for more details on releasing the cable from the frame, see section 8.4.1 and 8.4.2 above).

Fit the new lever with 2 x 4.8mm a 14mm black pop rivets, and route the cable via the top frame to rear frame joint and rear D ring as before, and re-attach to the gas spring following the instructions detailed in section 8.4.1 and 8.4.2 of this manual.

8.5: The Interface

Replace the interface clips (see Fig 0.3) if they are damaged or bent; replace the springs if they are stretched or overly soft in operation.

IMPORTANT

The interface uses 2 strong torsion springs that are under load. Care must be taken when working on the interface clip mechanism. The following instructions are the recommended method for dismantling the assembly to safely release the tension on the springs. If you are not confident to work on this assembly please return your frame to the Tendercare factory.

To dismantle the interface:

- Remove the front screws from the mounting using a 4mm hexagon key as shown (right).
- Loosen the rear screws but DO NOT remove them as the tension on the 2 torsion springs must be released before removing the clip mechanism from the interface frame.

Fig 8.5.1

Fig 8.5.2

To release the tension on the springs:

- Rotate the clips forward and lift the frame so that it pivots on the 2 loosened rear screws. Keep lifting until the 2 spring arms are released from the interface frame cross bar, as shown (left)

Fig 8.5.3

- Once the springs have been released, remove the 2 rear screws units a 4mm hexagon key. The interface clip assembly can then be easily taken apart by sliding off the 2 mounting blocks, springs and washers.

Take note of the position of the 2 chamfers of the mounting blocks as these MUST be put back in the correct orientation or the interface mechanism will not function properly.

Also take careful note of the orientation of the springs- the springs are handed and must be re-fitted correctly or there will not be sufficient tension on the mechanism to close the clips.

To reassemble the interface follow the reverse of these instructions and test as detailed in section 4.4 of this manual.

8.6: Replace Push Handle Adjustors

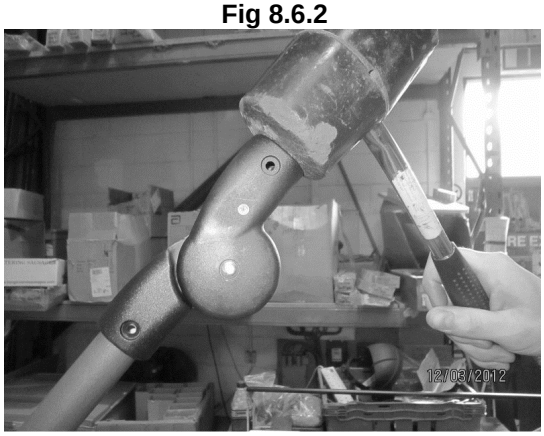
Replace if damaged, or remove and refit when changing the tilt cable and mounting lug (see section 8.4.3 above).

Fig 8.6.1

First Drill off the 8 x pop rivets securing the old adjustor with a 5mm drill, then separate the adjustors from the frame and push handle.

Upend the frame and remove the rivet ends from inside the tube.

Fig 8.6.2



Take the new adjustor and tap onto the frame using a mallet until the holes in the adjustor line up with the hole in the frame.

Ensure that the adjustor is positioned so that the round body is facing down and that the release button is to the outside of the frame.

Fig 8.6.3

Note the fit of the adjustor is very tight, if it is not possible to get the hole to fully line up it may be necessary to clear the holes using a 5mm drill bit.

Secure the new adjustors onto the frame with 4 x 4.8mm x 14mm black pop rivets.

Next fit the push handle into the top of the adjustors (ensuring that both adjustors are set at the same angle), tap down with the mallet and secure with a further 4 x 4.8 x 14mm black pop rivets.

Fig 8.6.4

Fig 8.6.5

Left: The new push handle adjustor fitted to the frame.

8.7: Locking Slider:
Replace if damaged or worn:

To remove the old locking slider:

Place the chassis on a flat surface and fold down as shown (see Fig 8.7.1).

Fig 8.7.1

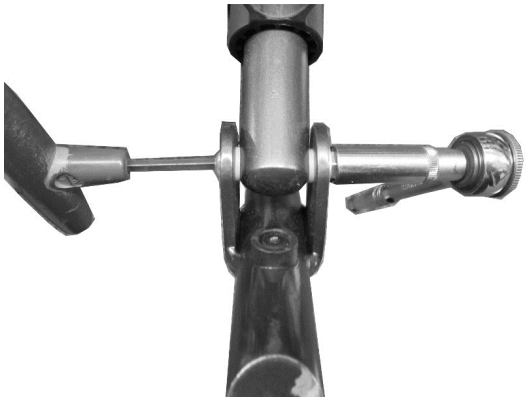


Fig 8.7.2

Undo the bolts that secure the front frame to the upper frame of the chassis on both sides (even if only changing one slider. Please see Fig 8.7.2). Take note of the positions of the washers and retain for use later.

The front frame of the chassis will drop forward providing access to the frame locking sliders as shown (see Fig 8.7.3).

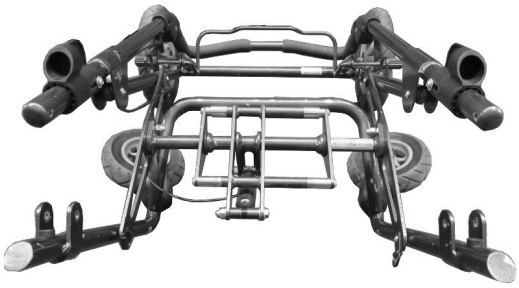


Fig 8.7.3

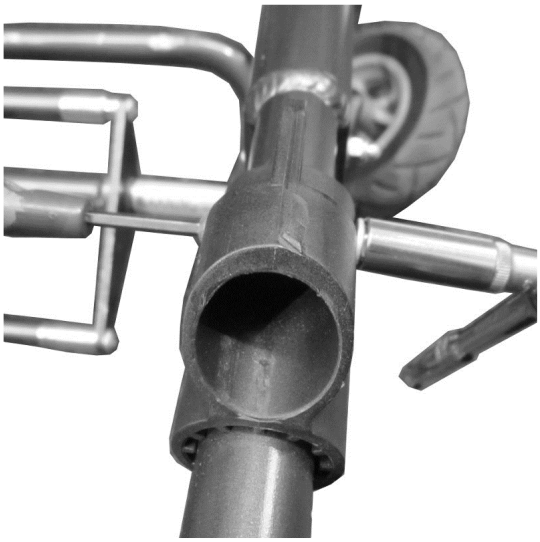


Fig 8.7.4

Using a 4mm hexagon key and a 10 mm socket or spanner, undo the M6 nylock dome nut securing the locking slider to the frame (see Fig 8.7.4).

Remove the bolt, taking note of the position of the washers.

Finally lift the slider and spring off the frame (see Fig 8.7.5).

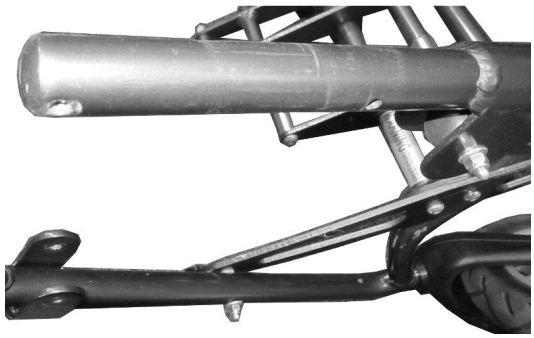


Fig 8.7.5

To fit the new locking slider:

Parts required (for one slider):
1: 1 x Locking Slider
2: 1 x Locking Slider Spring
3: 1 x M6 Nylock Dome Nut
4: 1 x M6 x 50mm Socket Button Bolt
5: 2 x M6 Form A Washers

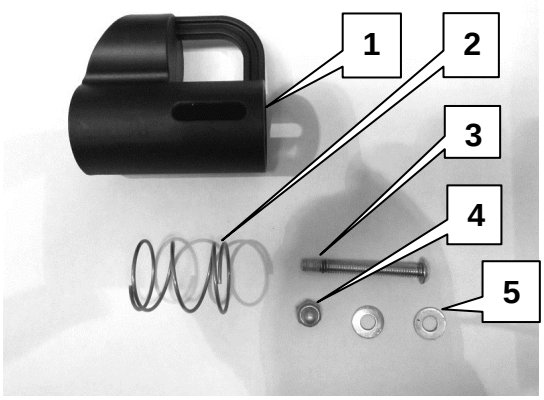


Fig 8.7.6

Fig 8.7.7

First, place the spring inside the locking slider so it sits against the support splines as shown (see Fig 8.7.7).

Place the slider and spring onto the upper frame tube with the locking point of the slider facing up, slide on until the fixing hole in the frame lines up with the back end of the slot in the slider (see Fig 8.7.8).

Fig 8.7.8

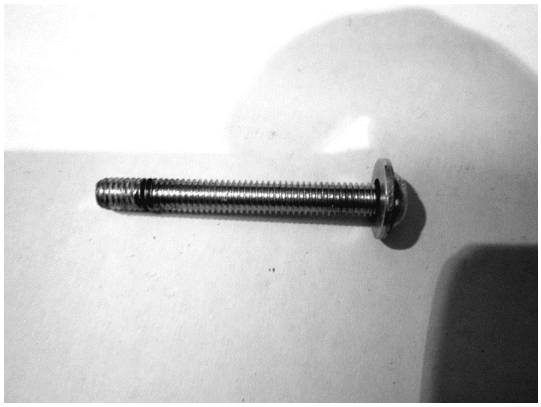


Fig 8.7.9

Next, take the M6 x 50mm socket button bolt and place one of the form A washers onto it as shown (see Fig 8.7.9).

Place the hexagon key though the slot in the slider in-between the spring coils, and pull the spring back down the slot so that the fixing hole is clear, whilst also supporting the slider (see Fig 8.7.10). If it is not possible to pull the spring back far enough, lift the slider off of the frame, rotate the spring a little and try again. Rotating the spring will expose different parts of the coil; rotate until a section of coil is visible that is close to the top of the slot, this will allow the spring to be compressed far enough to clear the hole.

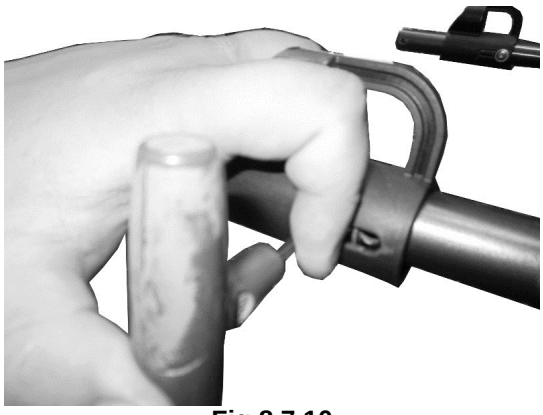


Fig 8.7.10

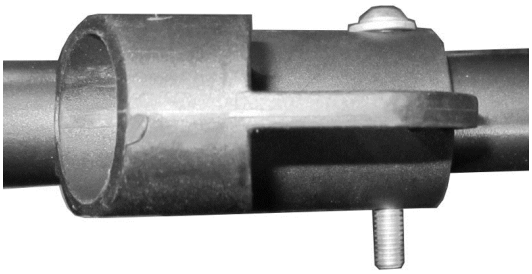


Fig 8.7.11

Whilst still holding the slider and spring back, push the M6 bolt and washer through the slider and mounting hole in the frame with the bolt head to the inside. Ensure that the bolt is above the spring and not going through the coils as shown (see Fig 8.7.11). The bolt provides the edge for the spring to work against.

Place the second washer and the M6 Nylock dome nut onto the other end of the bolt. Tighten using the 4mm hexagon key and 10mm socket to the point that the bolt threads are into the nylon insert inside the dome nut (when the thread engages with the insert the force required to tighten the nut will increase), but leaving enough slack that both washers are still free to turn (see Fig 8.7.12).

Re-assemble the frame, and test the operation of the mechanism (for details of operating the frame locking mechanism, please refer to the user manual). If the slider is too stiff, the dome nut might need to be loosened a little.

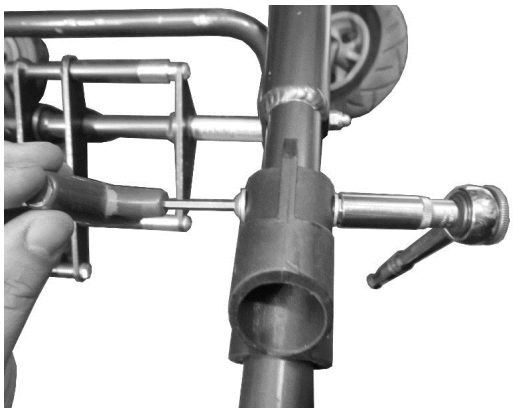


Fig 8.7.12

8.8: Instructions to fit a 'Vertical Cylinder Carrier' to the pushchair:

Note: These instructions only apply if the cylinder carrier has been supplied after initial delivery of the pushchair. Normally the carrier is fitted in the factory before dispatch. The following procedure is only to be carried out by a competent tradesperson.

Fig 8.8.1

Fig 8.8.1 left: The carrier is supplied in 2 parts, a mounting plate (left) and a curved cylinder support (right).

The mounting plate has to be fitted to the chassis first, then the cylinder support is attached to the mounting once in position.

The kit will be supplied with the following fixings:

3 x 4.8mm x 14mm black pop rivets
3 x M6 type t nylock nuts
1 x M6 x 45mm Socket Button Bolt
1 x M6 x 50mm Socket Button Bolt
1 x M6 x 55mm Socket Button Bolt

First: remove the nylock dome nuts securing the rear right hand transit bracket and rear to upper frame joint (see arrows, fig 8.8.2, right).

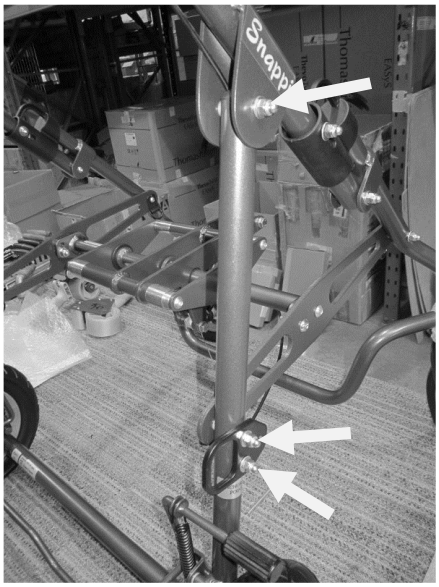


Fig 8.8.2

Fig 8.8.3

Fig 8.8.3, left: ensure the 3 bolts are left in place as shown.

Next, apply a strong coloured paint to the end of the protruding bolts.

Fig 8.8.4

Fig 8.8.5

Fig 8.8.5, left: Paint is applied to the ends of all 3 bolts.

Offer up the rear of the mounting plate to the 3 bolts.

Fig 8.8.6

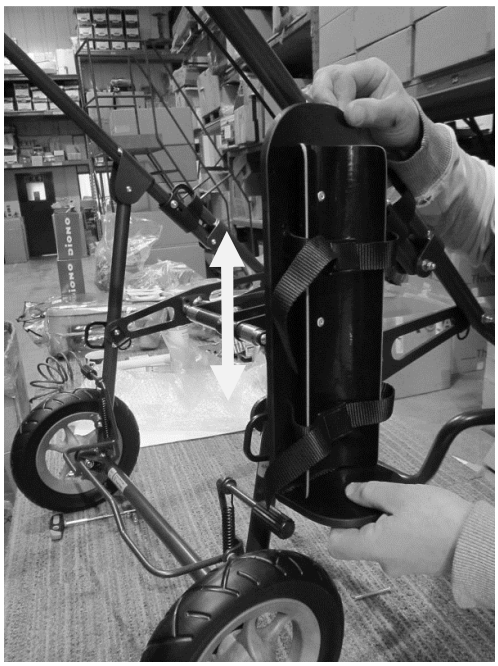


Fig 8.8.7

Position the plate such that the bottom of the mounting place is above the brake block (in the 'off' position), with the side of the plate sitting vertically. Ensure that the position of the bolts is clear of the cylinder support (as the support is curved, ensuring all 3 holes are at least 1 inch from the fixing holes will leave sufficient room for the fixing screws).

When in a suitable position, press the mounting plate against the protruding screws so that the paint leaves a mark on the place.

Fig 8.8.8, right: The mounting plate with 3 holes marked (these have been highlighted white on the photo to make them easier to see).

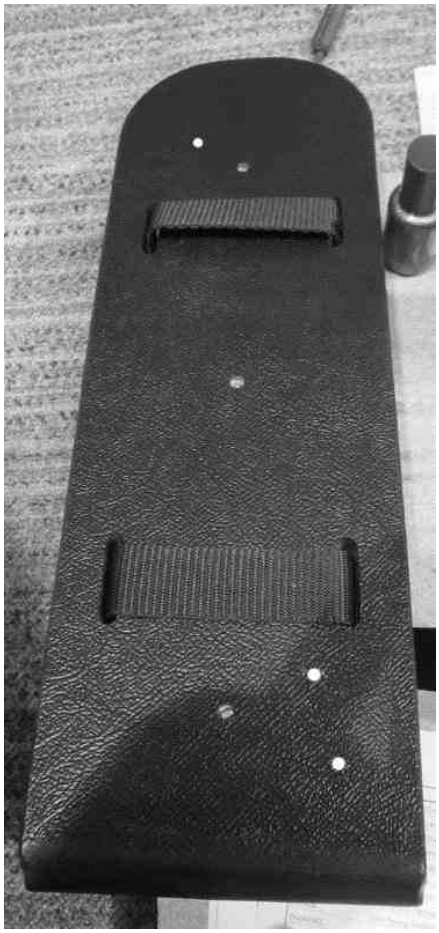


Fig 8.8.8

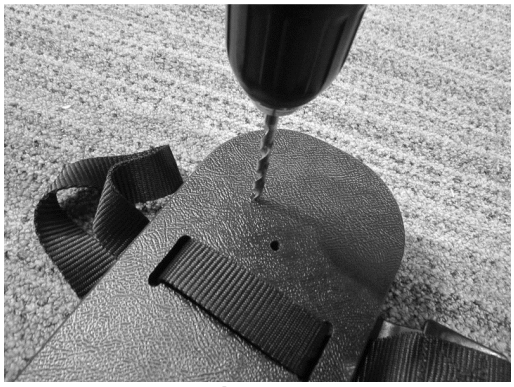


Fig 8.8.9

Drill off the 3 holes with a 6mm drill bit. These holes can be opened out slightly larger if there are problems fitting the plate to the pushchair.

Next, replace the 3 bolts in the chassis with bolts 5mm longer (supplied with the carrier).

The top bolt should be changed from an M6 x 45mm to M6 x 50mm.

The upper transit bracket bolt needs to change from M5 x 50 to M6 x 55mm.

Finally the lower transit bolt needs to change from an M6 x 40mm to M6 x 45mm.

Fig 8.8.10

With the longer bolts in place, attach the drilled mounting plate to the chassis (don't fix at this stage).

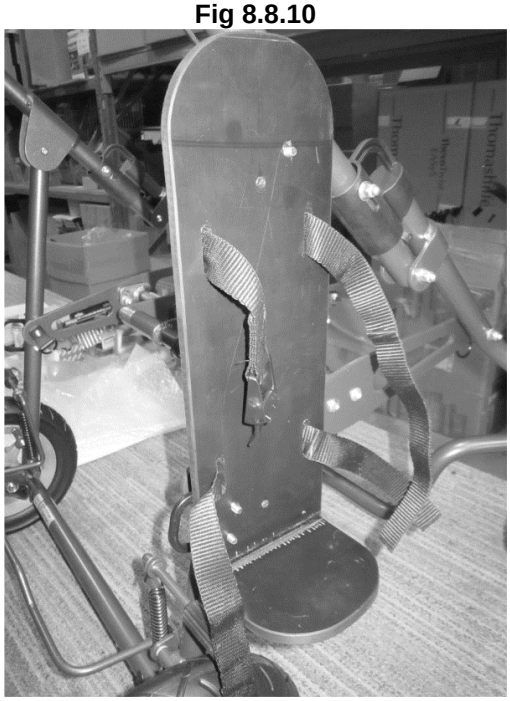


Fig 8.8.11

Fig 8.8.12

Using a pencil, mark out the area of overlap between the mounting plate and the transit bracket as shown (see Fig 8.8.12, left).

Then remove the mounting plate, and using a drill / hacksaw cut out the marked area. This is to ensure there is sufficient clearance to use the transit bracket when required.

Fit the cut and drilled plate back onto the chassis, and secure with the supplied 3 x M6 type t nylock nuts as shown (see Fig 8.8.13, right).

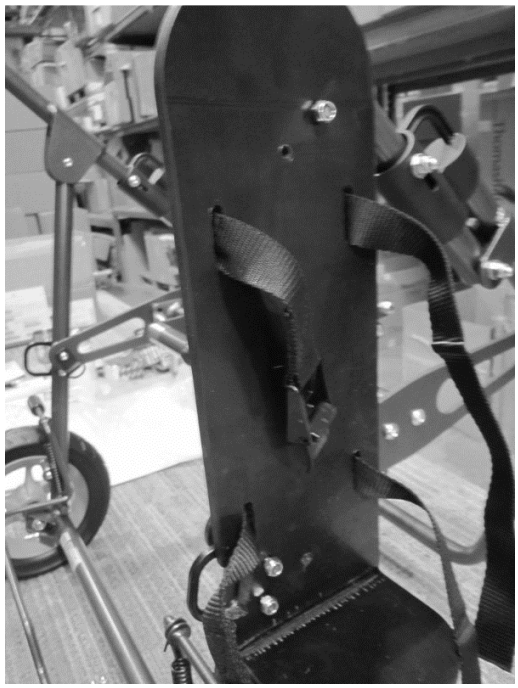


Fig 8.8.13

Fig 8.8.14

Finally secure the cylinder support back onto the mounting plate using 3 x 4.8mm x 14mm black pop rivets (supplied).

Fig 8.8.15, right: The vertical cylinder carrier fitted to the chassis.

Fig 8.8.15

9: Rearward Conversion:

The following instructions allow you to convert the wheelbase from forward to rearward facing. We recommend that this procedure is only carried out by a competent tradesperson. Alternatively this pushchair can be returned to the factory, contact Tendercare for more details.

Please note the wheelbase is not crash tested in the rearward facing position and cannot be used as a seat in a motor vehicle. When converting to rearward facing the transit brackets and anchorage point labels must be removed. Note, when set in the rearward facing position, some of the accessories will not fit, for more details please refer to the user manual.

To convert the wheelbase from forward to rearward facing:

- Remove any seat or interface fitted to the chassis and set the chassis up in its fully open position on a flat work surface. Set the brake on and choc the front wheels so they cannot roll forward.

- Next, separate the tilt cable from the gas spring (for details on how to do this please refer to section 8.4 of this manual).

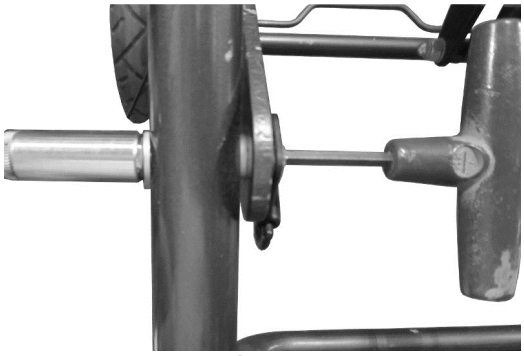


Fig 9.1

Undo the 4 M6 bolts securing the side plates and mid frame into the chassis using a 4mm hexagon key and a 10mm socket or spanner (see Fig 9.1). Take note of the position of the hanger clip and washers.

Remove the additional M6 bolts that secure the rear transit brackets to the frame and remove the transit bracket (see Fig 9.2). Also remove the ‘anchorage point’ labels.

If fitted, remove the front transit bracket by removing the front castor (see section 8.2 of this manual for details), and remove the front anchorage label.

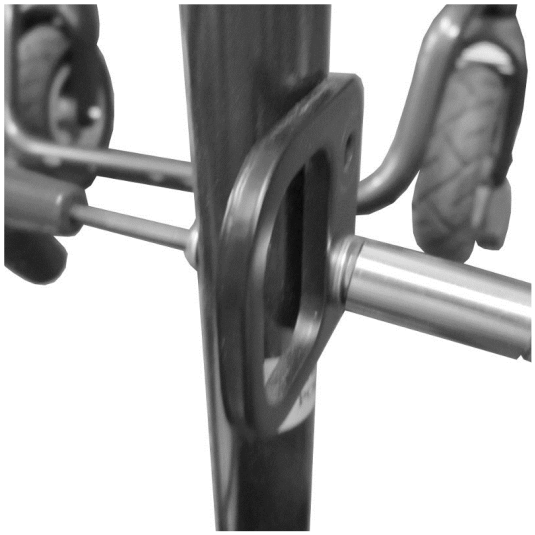


Fig 9.2

Fig 9.3

Fig 9.3 left: The chassis with the middle section removed.

After removing the rear transit brackets, fit 2 x plastic caps into the lower holes (see Fig 9.4). This is purely for aesthetics, if required these caps can be purchased from Tendercare.

Fig 9.4

Fig 9.5

Rotate the middle section 180 degrees in relation to the frame, so that the gas spring is facing the rear of the frame.

Re fit the middle section to the frame, with the bolt head and basket hanger to the inside and with a nylon washer in-between the side plate and frame (see Fig 9.5). Note that the bolts for the rear points are M6 x 50, these will need to be cut down to M6 x 45 or they will be too long. Secure into the frame with new Nylock dome nuts (do not reuse Nylock nuts).

Fig 9.6, right: The mid frame rotated and re fitted to the frame.

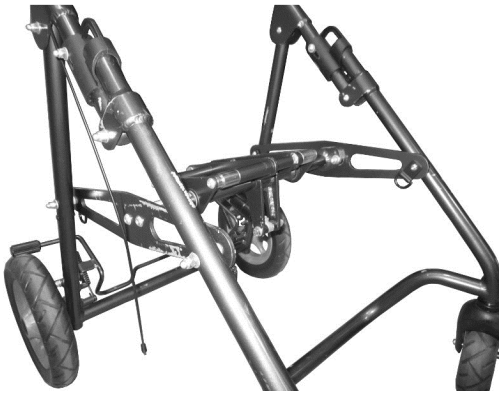


Fig 9.6

Fig 9.7

Next, loosen the 2 M8 bolts that screw into the main crossbar using a 5mm hexagon key (see Fig 9.7). Note these bolts are secured with Loctite thread locking compound and may require some force to loosen them off.

Using a 5mm hexagon key and a 13mm socket or spanner, remove the short M8 bolts that secure the angle lock plates (see Fig 9.8).

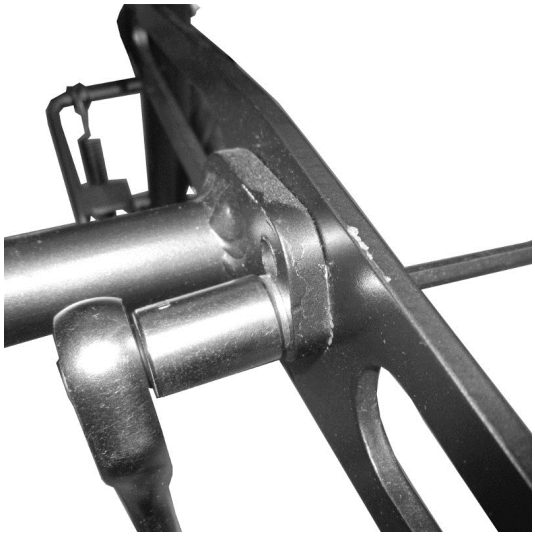


Fig 9.8

Fig 9.9

Rotate the middle section so that the top hole in the angle lock plate lines up with the hole in the side plate (see Fig 9.9). Secure in this position with the M8 bolt, washer and a new Nylock dome nut.

Finally, remove one of the M8 bolts that screws into the main crossbar, apply fresh Loctite and re attach. Repeat this for the other side.

Fig 9.10 right: The frame after conversion to rearward facing.

Fig 9.10

Notes:

- *Once the pushchair has been converted to rearward facing it cannot be used as a seat in a motor vehicle as the pushchair has not been crash tested in a rearward facing position.*

- *Some of the accessories are not compatible with the pushchair in its rearward facing configuration and will not fit. For more details on the accessories please refer to the user manual.*

9.1: Converting a rearward pushchair to forward facing, fitting transit brackets:

Follow the reverse of the instructions detailed in section 9

To fit the rear transit brackets:

Fig 9.1.1

Fit the transit bracket so the large ‘D’ shaped loop is off the back of the frame.

Place the M6 x 50mm socket button bolt through the P-Clip and D-Ring, side plate (turned around as per instructions in section 9), washer and transit bracket. Secure with an M6 steel form A washer and nylock dome nut.

Secure the lower bolt with an M6 x 40mm socket button bolt through the frame and transit bracket only. Secure with a steel form A washer and nylock dome nut.

To fit the front transit brackets:

Follow the instructions as detailed in section 8.2 of this manual.

Fig 9.1.2

Important: The transit brackets are not available as standard spare parts. These instructions are only to be used to switch a rearward facing pushchair to forward facing. If the frame or transit brackets have been damaged on a forward facing pushchair, the pushchair must be withdrawn from service and replaced. New transit brackets **MUST NOT** be fitted to a pushchair that has been involved in an accident or otherwise damaged.

10: Cleaning

1. To clean the wheelbase or interface, wipe with a damp cloth and dry thoroughly.

2. For more stubborn stains wipe with a damp cloth and warm water in which a little mild soap has been dissolved. Dry thoroughly.

3. Never use furniture polish or any spirit to clean the frame.

11: Parts Lists

Please refer to the appropriate parts list and exploded diagram for the part of the system you are interested in. The pages available that apply to this manual are;

Chassis Parts List (applies to both sizes of wheelbase), Interface parts list (applies to both sizes of interface).